



U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Species Account
PINE HILL FLANNELBUSH



Fremontodendron californicum ssp. *decumbens*

CLASSIFICATION: Endangered

Federal Register [61:54346](#) (PDF 104 KB); October 18, 1996

This species was listed as rare by the California Department of Fish and Game in July 1979, under the scientific name *Fremontodendron decumbens*. The California Native Plant Society has placed it on List 1B (rare or endangered throughout its range), also under this scientific name.



CRITICAL HABITAT: None designated

RECOVERY PLAN: [Recovery Plan for Gabbro Soil Plants of the Central Sierra Foothills](#). 8/30/2002

http://ecos.fws.gov/docs/recovery_plan/020830b.pdf (6 MB)

5-YEAR REVIEW: INITIATED

Federal Register [74:12878](#); 3/25/2009

DESCRIPTION

Pine Hill flannelbush, also known as Pine Hill fremontia, is a branched spreading shrub of the cacao family (Sterculiaceae), growing to about 1.3 meters (4 feet) tall. Dense star-shaped hairs cover the leaves and the younger twigs and branchlets.

The fuzzy, leathery leaves are shallowly or deeply lobed with five to seven lobes. The lobes are palmate. In other words, they look roughly like your hand, with the lobes corresponding to your fingers. The leaves are about 1-5 cm long.

Showy light-orange to reddish-brown flowers, 2-5 cm (1-2 inches) in diameter, appear from late April to early July. Solitary bees pollinate the flowers. Harvester ants disperse the seeds. The fruit is a capsule.

The subspecies can be distinguished from California flannelbush (*Fremontodendron californicum* ssp. *californicum*) and Mexican flannelbush (*F. mexicanum*) by the way it spreads on the ground, by its relatively long floral stalks (peduncles), and by its copper-orange flowers. See Hickman (1993) for a detailed description of these species.

Pine Hill flannelbush grows on scattered rocky outcrops either in chaparral or in the transitional zone between woodland and chaparral. It depends on fire to promote seed germination.

Pine Hill flannelbush is restricted to gabbro soils. Gabbro soils originate from volcanic rocks (gabbrodiorite) that are mildly acidic, rich in iron and magnesium, and often contain other heavy metals such as chromium. Gabbro, a dark large-crystalled rock, is formed when liquid magma cools slowly underground. A red soil is formed when the rock is exposed and weathers at the earth's surface. These soils are well-drained and are underlain by gabbrodiorite rocks at a depth of more than 1 meter (3 feet).

DISTRIBUTION

The only verified location is near Pine Hill in western El Dorado County. Plants are scattered within an area of approximately 2000 Hectares (5,000 acres). There are reports of small scattered populations in Yuba and Nevada County, but other reports describe these as California flannelbush.

U.S.G.S. 7.5 minute quads: Shingle Springs (510B) 3812068, Clarksville (511A) 3812161, Grass Valley (542A).

THREATS

Most of the plants are on the Pine Hill Ecological Reserve, which is managed by the California Department Fish and Game. The proximity of this reserve to human population centers renders it vulnerable to the long-term effects of fire suppression.

Restricted distribution increases the subspecies' susceptibility to catastrophic events such as disease or pest outbreak, severe drought or other natural or human-caused disasters. Loss of habitat, fragmentation and alteration of natural ecosystem processes have resulted from residential and commercial development.

Housing and commercial development, road maintenance, grading, change in fire frequency, unauthorized dumping, off-road vehicle use, some grazing practices, herbicide spraying, mining, competition from invasive nonnative vegetation, and other human-caused conditions threaten the remaining plants.

REFERENCES FOR ADDITIONAL INFORMATION

Learn more about protection efforts by the [Pine Hill Preserve](#).

Boyd, R. S. 1996. Ant mediated seed dispersal of the rare chaparral shrub *Fremontodendron decumbens* (Sterculiaceae). Madroño 43:299-315.

[General Information about California Plants](#)

Photo credit: Jeremiah Karuzas, FWS. Larger image:

http://www.fws.gov/sacramento/images/Pine_hill_flannelbush_Jeremiah_Karuzas_FWS.jpg

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